

Listing of Claims

1. (Canceled)

2. (Canceled)

3. (Currently Amended) A method of producing increased drought tolerance in a plant, said method comprising:

a) introducing into plant cells a plant transformation vector comprising a heterologous constitutive promoter operatively linked to a nucleotide sequence that encodes a DRO2 polypeptide comprising an amino acid sequence having at least 95% sequence identity to the amino acid sequence of SEQ ID NO:2 to produce transformed cells, wherein the DRO2 polypeptide is involved with drought tolerance;

b) growing the transformed cells to produce a transgenic plant, wherein said heterologous constitutive promoter provides overexpression of a DRO2 transcript, and

c) identifying said transgenic plant with increased drought tolerance by measuring relative water content of said transgenic plant.

4.-16. (Canceled)

17. (New) The method of claim 3, wherein the nucleotide sequence that encodes the DRO2 polypeptide comprises the amino acid sequence of SEQ ID NO:2.

18. (New) The method of claim 3, further comprising subjecting the plant to water deprivation prior to identifying said transgenic plant with increased drought tolerance by measuring relative water content of said transgenic plant.

19. (New) The method of claim 18, wherein subjecting the plant to water deprivation comprises depriving the plant of water for at least 10 days.